Cannabis/Ganja and the Agriculture Industry – Opportunities and Risk

7th Annual Growth and Resilience Conference - An appropriate and sustainable model for health care in the ECCU/OECS

Agile Infrastructure, Traditional Medicine and Medicinal Cannabis

Presented by: Kadamawe Knife
Content - Context

- Caribbean the 4th Logistic Space
- Climate Change
- Caribbean National Visions and SDGs
- Health Wealth and Food Security
“A country and a people that become self-sufficient by the development of agriculture can look forward with confidence to the future. Agriculture is not only the chief among those fundamental and ancient tasks which have been essential to the survival of mankind, but also ranks first among the prerequisites to industrial and other developments. Only when a solid agricultural base has been laid for Our country’s commercial and industrial growth can We ensure the attainment of the ultimate goal of Our development programme, namely, a high standard of living for Our people. (College of Agriculture and Mechanical Arts 1958, HIM Selected Speeches, IEMI 1967, pg. 6).”
<table>
<thead>
<tr>
<th>Types</th>
<th>Example</th>
<th>Location</th>
<th>Eligible Activities <em>(being contemplated)</em></th>
<th>Target Market</th>
<th>Examples in other parts of the world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized SEZs</td>
<td>Commodity Port</td>
<td>St. Thomas, St. Catherine, and Clarendon</td>
<td>Petrochemical and other heavy industry; dry and wet bulk</td>
<td>Americas, Asia</td>
<td>Rotterdam</td>
</tr>
<tr>
<td></td>
<td>Dry Dock</td>
<td>Clarendon, Kingston</td>
<td>Maintenance and repair of ships, boats, and other watercraft</td>
<td>North Atlantic, Caribbean, US Gulf</td>
<td>Dubai, Singapore, Malta, Bahamas</td>
</tr>
<tr>
<td></td>
<td>Airport-based</td>
<td>Vernamfield, Clarendon</td>
<td>Air cargo trade and transhipment, maintenance, repair and operations (MRO)</td>
<td>Global</td>
<td>Morocco (MRO), Singapore, Dubai</td>
</tr>
<tr>
<td></td>
<td>Norman Manley International</td>
<td></td>
<td>Air cargo trade and transhipment; passenger</td>
<td>Americas</td>
<td>Miami, Amsterdam, New York, London</td>
</tr>
<tr>
<td></td>
<td>Sangster International</td>
<td></td>
<td>Air cargo trade and transhipment; passenger</td>
<td>Americas</td>
<td>Miami, Amsterdam, New York, London</td>
</tr>
<tr>
<td>Port-based</td>
<td>Kingston Container Terminal and Kingston Wharves</td>
<td></td>
<td>Merchandise trade, semi-finished products and transhipment</td>
<td>Asia (scrap metals), south America (ethanol), Europe (tyres), CARICOM</td>
<td>Mariel, Colon, Singapore, Singapore, Singapore</td>
</tr>
<tr>
<td>Technology Park</td>
<td>Portland Bight</td>
<td></td>
<td>Heavy industries and commodities</td>
<td>Americas</td>
<td>Singapore</td>
</tr>
<tr>
<td>Logistics Park</td>
<td>Caymanas SEZ</td>
<td>Caymanas, St. Catherine</td>
<td>Light manufacturing and assembly</td>
<td>Americas</td>
<td>Panama Pacifico</td>
</tr>
<tr>
<td></td>
<td>Garmex and other SEZs (such as Kingston and Montego Bay Free Zone)</td>
<td>Kingston</td>
<td>Light manufacturing and assembly, BPO</td>
<td>Americas</td>
<td>Maquiladoras (Mexico), Costa Rica</td>
</tr>
</tbody>
</table>
Context – Sustainable Development Paradigm and the Integrated Assessment Approach – water, food, health and energy security
Claim - Medical Marijuana – A Zero Sum Game

Necessary but not sufficient – Sub-optimal outcome
- Israel/America capital recovery on research from 1950s

At best Medical Marijuana import substitution model – high levels of intellectual and economic dishonesty among those advancing Medical Marijuana

Need to develop grounded parallel industry focusing on wellness and therapeutics

Need a regional approach to truly benefit while reducing negative externalities – reduce attractiveness of illegal trade

Social Agro-preneurship – Social Enterprise Win- Win
Integrated Assessment Approach

- Psycho-Social & Socio-Political
- Biodiversity
- Economic

CETP - Think - Know - Act - Become
## Economic Impact

<table>
<thead>
<tr>
<th>Illegal</th>
<th>Legal</th>
</tr>
</thead>
</table>
| • High cost of fighting trade – criminalization of unemployed youth (most valuable natural resource)  
• Significant loss of enterprise opportunities  
• Loss of revenue for state (tax)  
• High operations cost and Lower income streams from sale of output – **limited value chain**  
• High import bill for inputs used – seeds, fertilizers | • Increased multiplier effect from diversification of industry  
• Reduce dependency on tourism while supporting alternative tourism – wellness/health tourism  
• Increase flow of foreign exchange and other revenues  
• Greater distribution and redistribution of wealth across all classes  
• IP benefits |
<table>
<thead>
<tr>
<th>Illegal</th>
<th>legal</th>
</tr>
</thead>
</table>
| • Criminalization of the youth – further fuels potential crime  
• Low self esteem among children within communities – parents are criminals?  
• Continued absence of fathers from home due to long stay in the fields  
• Lack of trust between citizenry and state – lack of support for CBP  
• Isolation/stigmatization of communities | • Reallocation of resources to support youth programmes  
• Increased self esteem and peace of mind among population  
• Improved relationship between citizenry and state  
• Strengthening of social political and economic capital among CBOs  
• Less reliance of state resources |
<table>
<thead>
<tr>
<th>Illegal</th>
<th>Legal</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Loss of flora and fauna (endemic species)</td>
<td>• Preservation of habitat, reduce threat to endemic species</td>
</tr>
<tr>
<td>• Habitat destruction of endemic species</td>
<td>• <strong>Restoration of mined out areas</strong></td>
</tr>
<tr>
<td>• Potential pollution of watersheds</td>
<td>• Rehabilitation of soil</td>
</tr>
<tr>
<td>• Increased used of poisonous pesticides and fertilizers – destroys ecology</td>
<td>• Support for organic agriculture</td>
</tr>
<tr>
<td>• Loss of genetic and genome resources</td>
<td>• support (technical assistance) and monitor farming practices</td>
</tr>
<tr>
<td></td>
<td>• Support for nature and wellness sector</td>
</tr>
</tbody>
</table>
“If all fossil fuels and their derivatives, as well as the deforestation of trees for paper and agriculture are banned from use in order to save the planet, and reverse the greenhouse effect: then there is only one known renewable natural resource able to provide the overall majority of our paper, textiles and food, meet all the world’s transportation, home and industrial energy needs, reduce pollution, rebuild the soil and clean the atmosphere – all at the same time – our old stand-by that did it all before: Cannabis Hemp... Marijuana”

Jack Herrer 1985 & 1991 – The Emperor Wears no Clothes
Research revealed positive indications when using cannabis for asthma, glaucoma, nausea from chemotherapy, anorexia, and tumors, as well as a general use antibiotic; epilepsy, Parkinson’s disease, multiple sclerosis, dystrophy, and tumors.

The Cannabis hemp seed is a complete source of vegetable protein... The composition of the seed is unique in the vegetable kingdom. 65% of hemp seed’s protein content is in the (Edestin) edible form...is ready available in the form found in human blood plasma – the fluid portion of blood which supplies nutrients to tissue --- hemp seed oil (30% of the seed) lower in saturated fats than any other cooking oil including soya beans and canola.
When considered on a planet-wide, soil-wide, climate-wide basis, cannabis is at least four times and, more likely, 50 times richer in renewable biomass/cellulose potential than its nearest rivals on the planet – cornstalks, trees, sugarcane, kenaf, etc.

When hemp is grown for Biomass as an energy crop, CO2 is breathed in by the living plants to build cell structure; the leftover oxygen is breathed out replenishing earth’s air supply, then when the carbon rich hemp biomass is burned for energy the CO2 is released back into the air. Eco cycle is balanced (environmental balance).
Summary of Uses – Ganja Agro Enterprises - Much more than smoking

- Biomass Energy
- Food Oils and Protein
- Building Materials and Housing
- Economic stability, profit and free trade
- Medicine
- Smoking, Leisure and Creativity

Lighting and Oil
Ships and Sails
Textiles and Fabrics
Fiber and Pulp Paper
Rope, twine, and cordage
Art and Canvas
Paints and Varnishes

CETP - Think - Know - Act - Become
Caribbean – Potential Ganja Agro Enterprises

Caribbean have both mainland countries and islands
• Mainland (Belize, Suriname, Guyana) – Industrial Hemp and components requiring large acreage (Male of specie)
• Island - niche and value added – neutraceuticals and functional foods (female of species)
Social Entrepreneurship Framework - Quadruple Bottom Line

Social

Environmental

Economic

Cultural

CETP - Think - Know - Act - Become
Business Model Components

How will the sector create value?

For whom will the Sector create value?

What is the sector internal source of advantage?

How will the sector differentiate itself?

How will the sector sustain its operations (make money?)

What are the sector’s time, scope, size and ambition?
Social Value Creation Institutional Framework – Ganja Industry

Governance stage - registration of groups -

International partnership – Angel Funding; Venture Capitalist - Diaspora

Policy Development - Relevant ministries

Enterprise Development Stage – Social Enterprise Model.

Research and Incubator systems - UWI, etc
Conclusion

- Medical marijuana is necessary but not sufficient
- The region have strategic advantage in both male and female – medical, recreational and industrial
- Basis to push integrated agricultural practices – reduce regional import bill
Give Thanks

One hand can’t clap and many hands mek the work lighter- Love in the house Itinually